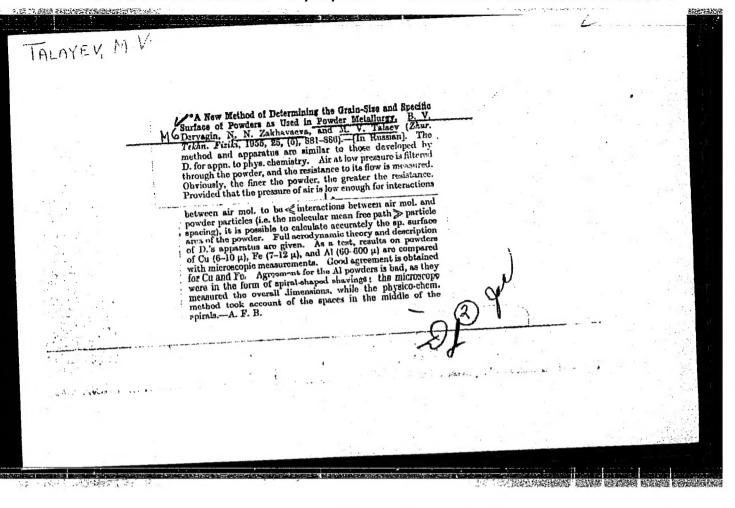
#### "APPROVED FOR RELEASE: 07/13/2001

#### CIA-RDP86-00513R001754730008-6



TALAYEVA, Yu.G., mladshiy nauchnyy sotrudnik

**《新聞》的問題的問題的意思** 

Conference on problems in sanitation bacteriology. Gig. & san. 23 no.3:88-89 Mr 158. (MIRA 11:4)

1. Iz Instituta obshchey i kommunal'noy gigiyeny imeni A.N. Sysina MN SSSR.

(BACTER IOLOGY -- CONGRESSES)

LALLYKE - KALALIMIKERA, A

HELAIA, N. K., TALAIKO-KALASHVIKOVA, A. Z.

Tellurine test as quick and early diagnosis of diphtheris. Pollutinia, Moskve No. 6, Nov.-Dec. 50. p. 59-63

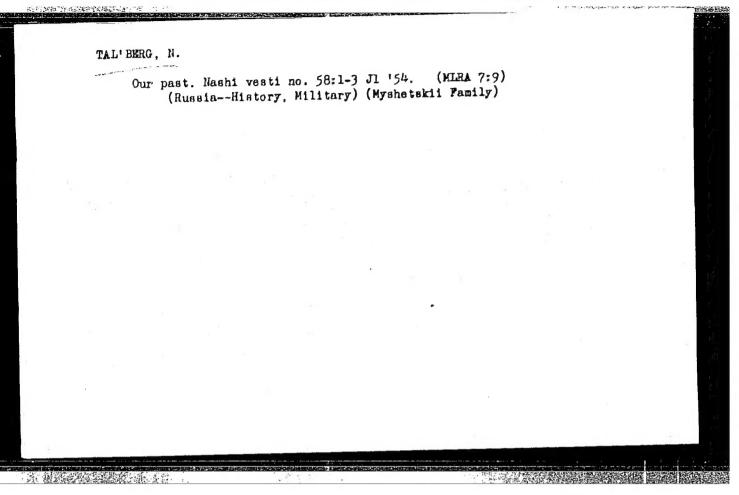
1. Of the Contral Scientific-Research Pediatric Institute of the Ministry of Public Health RSFSR (Director-Prof. S. P. Borisev).

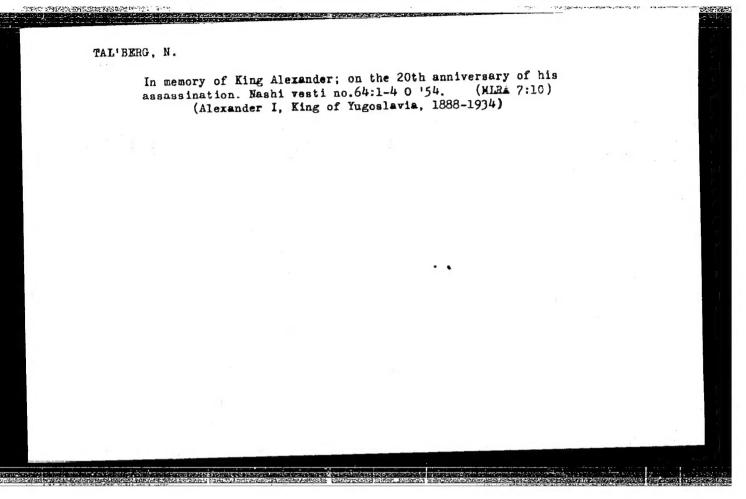
CLF. 20, 3, March 1951

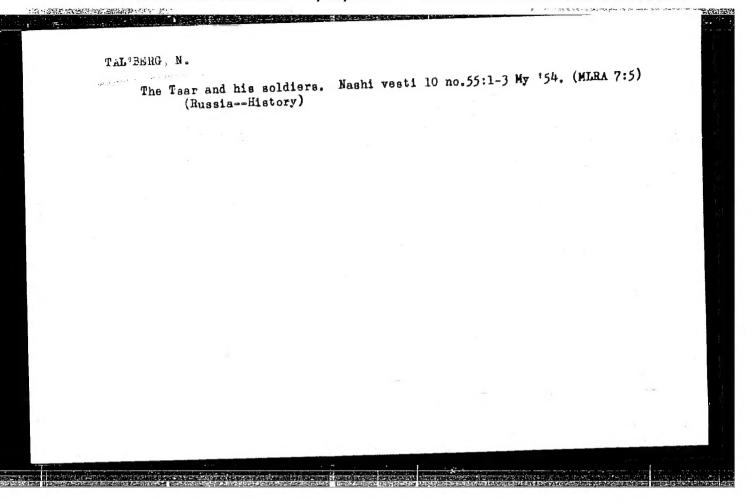
Talayko Kalashnikova, a.z.; Guseva, a. zavedujushchaya; BIRGER, O.G., nauchnyy rukovoditel; PROKHOROVICH, Ye.V., glavnyy vrach; SHIRVINDT, B.G., zavedujushchiy.

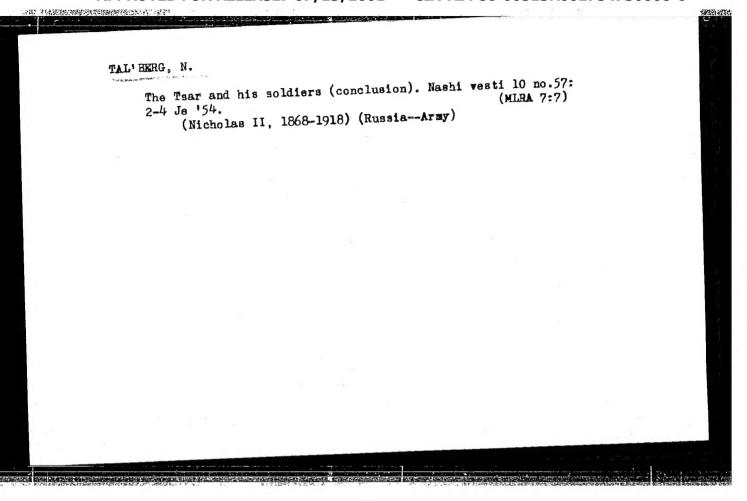
Experimental study of the diagnostic tellurite test. Zhur.mikrobiol.epid.i immun. no.4:25-28 ap '53. (MLRA 6:6)

1. Tsentral'naya laboratoriya Klinicheskoy detskoy bol'nitsy (for Guseva and Birger, Talayko-Kalashnikova). 2. Klinicheskaya detskaya bol'nitsa (for Prokhorovich). 3. Infektsionnyy otdel Nauchno-issledovatel'skogo pediatricheskogo instituta Ministerstva zdravookhraneniya RSFSR (for Shirvindt, Talayko-Kalashnikova). (Diphtheria)



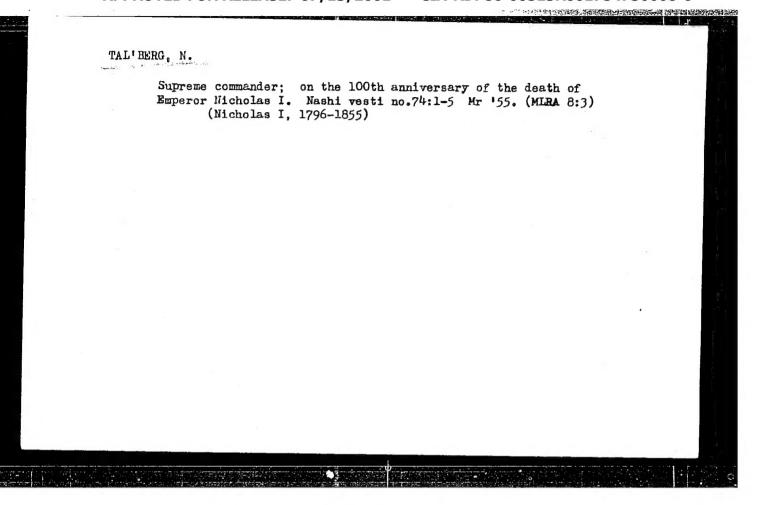






TAL'BERG, N.

From history's treasure box. Mashi vesti no.72:1-3 F '55. (MLRA 8:1)
(Suvorov, Aleksandr Vasil'evich, 1729-1800) (hassla--History,
Military)



TAL: BERGS, Kh.V. [Talbergs, H.]

Turntable for finishing operations. Sbor.vnedr.rats.pred. v les. i meb.prom. no.2:98-100 '59. (MIRA 13:8)

1. Rizhskiy derevoobrabatyvayushchiy zavod "Assotsiatsiya." (Furniture industry--Equipment and supplies)

TATELARUKI, J.

Talbierski, J.; Domanski, H.

"Influence of the shape and cross section of an element on the resistance of concrete to squeezing." <u>Biuletyn.p.</u> 17A (<u>Inzyniera I Eudownictwo</u>, Vol. 10, No.8, Aug. 1953, Warszawa)

SO: Monthly List of East European Accessions, Vol. 3, No. 6, Library of Congress, June, 1954, Uncl.

TALBIER E1, J.

Experiences and achievements of the Institute of Building Construction in the field of the ac elerated curing of concrete.

p. 25 (Budownictwo Przemyslowe) Vod. 4, No. 9, Sept. 1955, Warszawa, Poland

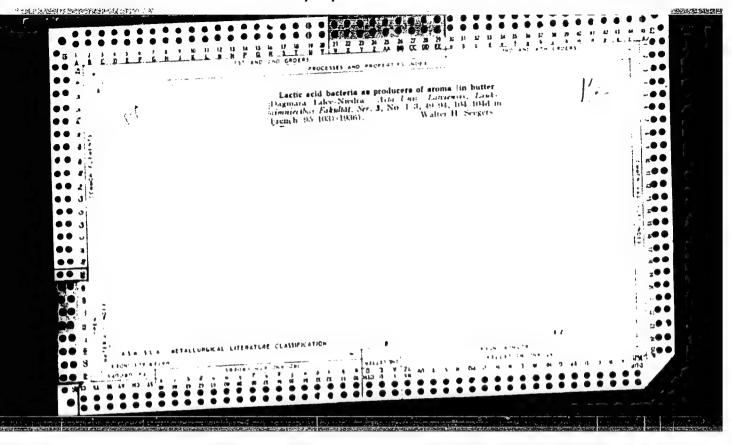
SO: MONTILY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VCL. 7, NO. 1, JAN. 1958

PURTULAL, T. THEL. F.: FULLION, 9.

There building sobjectives and modern Danish building at the Copenhagen reacting, 2. 16.

(Buildwrintwn Pusceyelnue, Vol. 1. 10. 7/1, July Lug 1950, 100 80. F. 200)

Dr.: Monthly list of Fast Durmean Accessions (RENLY 10, Vol. 6, No. 1, Aug 2050, Unit.



L 15686-65 EWT(1)/EPR/EPA(w)-2/EPA(bb)-2 Pab-24/Ps-4 ASD-3/SSD #W/GG ACCESSION NR: AP4047488 S/0120/64/000/005/0194/0195

AUTHOR: Abukov, A. A.; Tal'dayev, E. T.

TITLE: Vacuum lock

SOURCE: Pribory\* i tekhnika eksperimenta, no. 5, 1964, 194-195

TOPIC TAGS: vacuum lock

ABSTRACT: A new type of vacuum lock is described which is intended for use in remodeling (replacing a mercury-vapor pump by an oil-vapor pump) vacuum surface-coating equipment. The lock is designed for mounting in a thick glass plate conventional in Soviet vacuum outfits. The lock operating mechanism is mounted outside the vacuum space and has a minimum number of movable parts. A detailed drawing is given and briefly explained. Orig. art. has: 1 figure.

ASSOCIATION: Gosudarstvenny\*y opticheskiy institut (State Optical Institute)

SUBMITTED: 09Aug63

ENCL: 00

SUB CODE: IE

NO REF SOV: 000

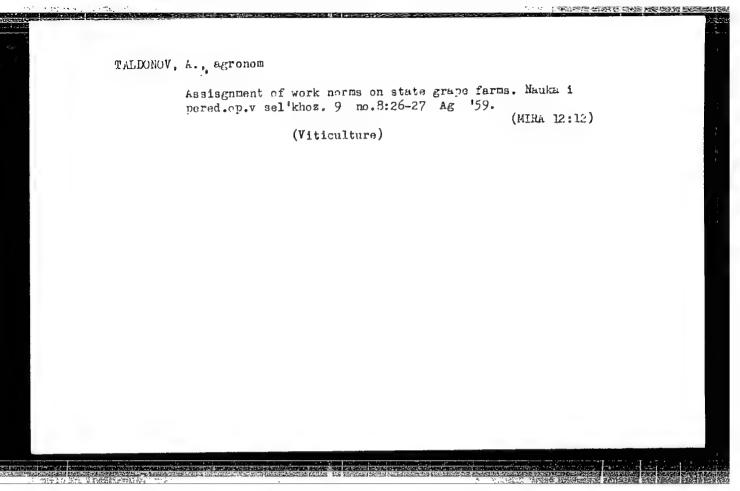
OTHER: 001

Card 1/1

TALDONOV, A., agronom-ekonomist

Organization and wages on viticultural state farms. Sots.trud
4 no.7:130-131 J1 '59. (MIRA 13:4)

(Crimea--Viticulture) (Wages)



TALLYKIN, A., podpolkovnik

Antiaircraft gunners cover a crossing. Voen. vest. 41 no.5:
47-50 My '61. (MIRA 14:8)
(Stream crossing, Military) (Antiaircraft artillery)

TALDYKIN, A.M.

Shot-peening heads. Standartizatsiia 27 no.5:49 My 163.

(MIRA 16:6)

(Shot peening—Equipment and supplies)

# TALDYKIN, A.L.

Taldykin, A. T. Systems of elements of a Hilbert space and series formed from them. Mat. Sbornik N.S. 29(71), 79-120 (1951). (Russian)

Let  $\{\varphi_t\}$  be a sequence of elements of a Hilbert space,  $\Phi$  the matrix  $\|(\varphi_t, \varphi_t)\| = \|\varphi_{t't}\|$ ,  $\Phi_n$  the  $n \times n$  upper leithand corner of  $\Phi_t$ ,  $\|\varphi_{n''}\| = \Phi_{n''}$ . Let  $\lambda_1^n$  and  $\lambda_n^n$  denote the lowest and highest eigenvalues of  $\Phi_n$ ,  $\lambda_1 = \lim \lambda_1^n$ , and  $\lambda' = \lim \lambda_n^n$  is finite if  $\Phi$  is bounded. Systems of elements are classified according to the properties of  $\Phi_t$ ; also a system is called according to the properties of  $\Phi_t$ ; also a system is called according to the properties of  $\Phi_t$ ; also a system is called according to the properties of  $\Phi_t$ ; also a system is called a necessary and sufficient condition for  $\{\omega_t\}$  to be the set of components of an element, or for  $\sum c_t \varphi_t$  to be strongly spanned by the system. For a minimal system there exists a biorrhogonal system  $\{\varphi^t\}$ . The unique biorrhogonal system there exists a biorrhogonal system  $\{\varphi^t\}$ . The unique biorrhogonal system to a strongly minimal system,  $\sum |A_t|^2$  is convergent, and liked system. If  $\lambda_1 > 0$  the allied system has a bounded matrix and the system is called strongly minimal. If  $\lambda_1 = 0$  the system, if minimal, is called weakly minimal: this implies that 0 is not in the point spectrum of  $\Phi_t$ .

A strongly minimal system with bounded matrix (in the operator sense) is called normal; such systems nave many properties generalising those of orthonormal systems. The spaces  $[\varphi_r]$  and  $[\varphi^r]$  coincide. If  $(f, \varphi_r) = A_r$ ,  $(f, \varphi^r) = A^r$ , and f is the projection of f on  $[\varphi_r]$ , then

$$\frac{1}{\lambda'}\sum |A_r|^2 \leq \|\hat{f}\|^2 \leq \frac{1}{\lambda_1}\sum |A_r|^2, \quad \lambda_1\sum |A^r|^2 \leq \|\hat{f}\|^2 \leq \lambda'\sum |A^r|^2.$$

Scurce: Mathematical Revisus.

to a strongly minimal system,  $\sum |A^r|^2$  is convergent, and  $\sum A_r \varphi^r$  converges strongly to f if  $\sum |A_r|^2$  is convergent, and  $\sum A_r \varphi^r$  converges strongly to f if  $\sum |A_r|^2$  is convergent, and tion to f by a linear combination of  $\varphi_1, \dots, \varphi_n$ . If  $\{\varphi_r\}$  is strongly minimal,  $a_n^r$  tends weakly to  $A^r$  as  $n \to \infty$ ; if, in particular,  $\Phi$  is the matrix of a selfadjoint operator, convergence is strong. If  $\{\varphi_r\}$  is strongly minimal and  $\sum |\varphi_{rk}|^2 < \infty$  for all k, then  $\|(\varphi^r, \varphi^r)\| = \|\varphi^{rr}\|$  is  $a^r$  left inverse to  $\Phi$  and  $\sum |\varphi_{rk}A^r| = A_r$  for any f. If f is such that  $\sum |A_r|^2 < \infty$ , then  $A^r = \sum \varphi^r A_r$  and, for any g,  $\sum A_r (\varphi^r, g)$  converges to (f, g), Further theorems are given concerning convergence of series of these types under varying hypotheses on  $\Phi$  and on the system.

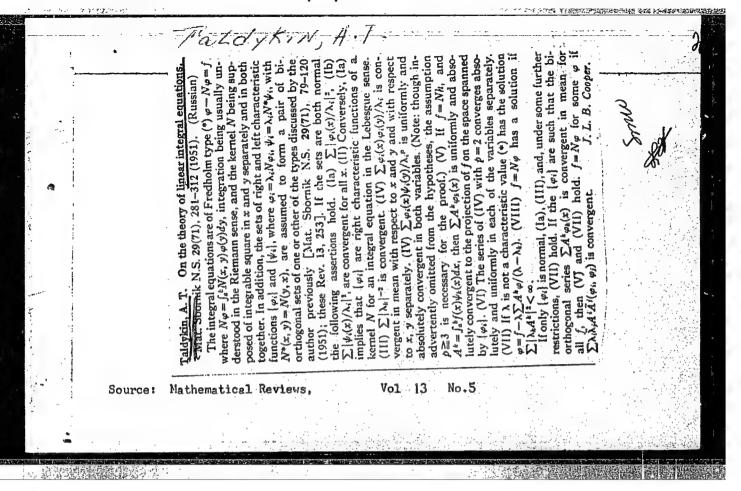
13<sub>No.</sub> -

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Vol

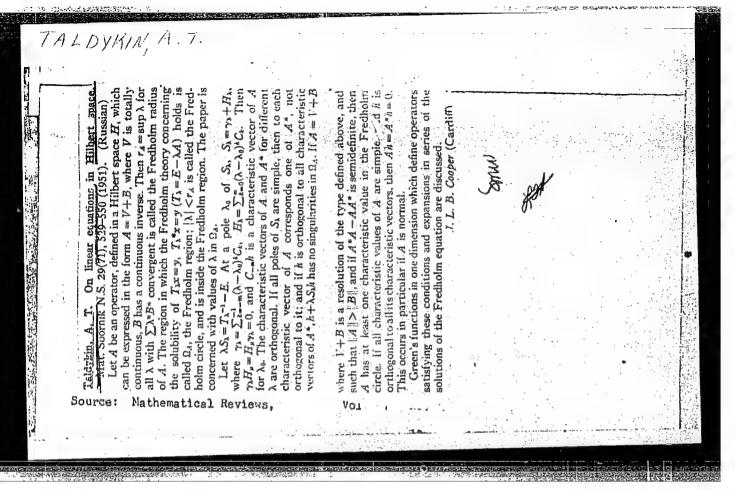
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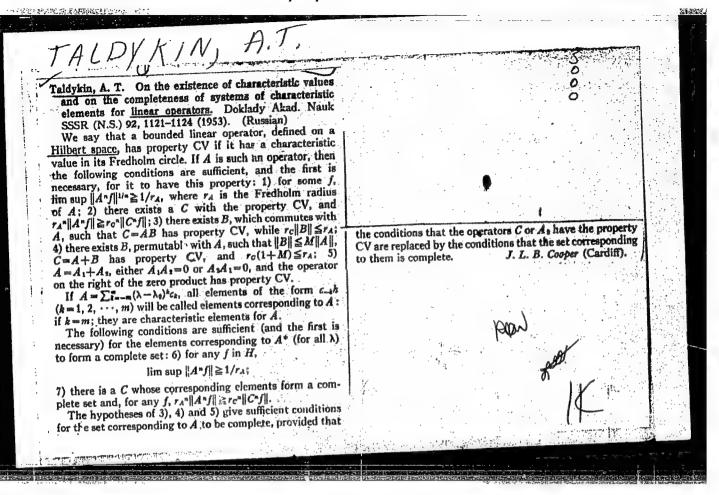
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CIA-RDP86-00513R001754730008-6





TALDYKIN, Aleksandr Tikhonovich

(Military Red Banner Engineering Academy of Communications imeni Budennyy), Academic degree of Doctor of Physico-Mathematical Sciences, based on his defense, 28 June 1954, in the Council of the Leningrad, Order of Lenin State U imeni Zhdanov, of his dissertation entitled: "Systems and series of elements. Line Equations." Academic title of Professor. Chair: "Mathematics."

Academic degree and/or title: Doctor of Sciences and Professor

SO: Decisions of VaK, List no. 24, 26 Nov 55, Byulleten' MVO SSSR, No. 20, Oct 57, Moscow, pp 22-24, Uncl. JPRS/NY-471

TALDYAIL, A. P.

USSR/Mathematics - Linear operator eigenvalues

FD-449

Card 1/1

: Pub. 64 - 1/11

Author

: Taldykin, A. T. (Leningrad)

Title

: Existence of eigenvalues and completeness of a system of eigenelements

of certain linear operators

Periodical

: Mat. sbor., 34 (76), 201-212, Mar/Apr 1954

Abstract

: Treats the operator  $T_{\lambda} = E - \lambda A$ , where E is the identity operator and A is a bounded linear operator defined in a complex Hilbert space H. Cites S. M. Nikol'skiy, "Linear equations in linear normed spaces," Izv AN SSSR, seriya matem. 7, No 3 (1943), 147-163, and A. I. Plesner and V. A. Roklin, "Spectral theory of linear operators II" Uspekhi matem. nauk, Vol I, No 11 (1) (1946), 71-191.

Institution :

Submitted

: November 1952

USSR/Mathematics - Topology

Card 1/1 Pub. 22 - 6/23

Authors : Taldykin, A.T. Aleksandr Tikhonovich (Dr. Physico-Math Sci.)

Title Regarding the problem on the existence of eigen values of linear operators

Periodical Dok. AN SSSR 99/6, 905-908, Dec 21, 1954

Abstract

Abstract

Abstract

A series of theorems is presented proving the existence of eigen values for linear operators of the AB and BA types, where  $A = C C_1 \dots$  and  $C, C_1 \dots$  are limited linear operators. The proof is obtained in the light of the theory of Fredholm's circle in the Thebert space. One USSR

reference (1953).

Institution: Chair Mathematics, Leningrad State Univ imeni Zhdanov

Presented by: Academician A.N. Kolmogorov, September 22, 1954

23

16(1) AUTHOR:

Taldykin, A.T ...

06321

SOV/140-59-6-22/29

TITLE:

Systems and Series of Elements With Unbounded Gram Matrices

PERIODICAL: Izvestiya vysshikh uchebnych zavedeniy. Matematika, 1959,

Ur 6, pp 174-188 (USSR)

ABSTRACT:

The author considers systems  $\{\varphi_i\}, i=1,2,\ldots,$ (1)

of elements of a Hilbert space H, series developments with respect to these systems of elements and other connected

questions. The investigation essentially bases on the properties

of the Gram matrix

 $\Phi = \| \varphi_{ik} \|$ ,  $\varphi_{ik} = (\varphi_i, \varphi_k) (i, k = 1, 2, ...)$ (2)

of the system (1) and the operator defined by it. The results generalize the case already treated by the author [Ref 8],

where the Gram matrix is bounded.

There are 11 references, 7 of which are Soviet, 3 German,

and 1 Hungarian.

SUBMITTED:

June 24, 1958

Card 1/1

TALDYKIN, A.T. (Leningrad)

Eigenvalues and adjoint elements of linear operators. Zhur. vych.

mat. i mat. fiz. 2 no.1:165-169 Ja-F '62. (MIRA 15:3)

(Eigenvalues) (Operators (Mathematics))

GORINSHTEYN, L.L., kand. tekhn. nauk; ZAY'YALOV, V.A., kand. tekhn. nauk;

NEMOLVIN, N.S., inzh.; TALDYKIN, B.S.

Complex improvements and automatic control of technological operations at the peat-briquet plant. Torf. prom. 36 no.7:11-16 '59.

(MIRA 13:3)

1.Kalininskiy torfyanoy institut (for Gorinshteyn, Zav'yalov).
2.Tatishchevskoye torfopredpriyatiye (for Nemolvin, Taldykin).

(Peat industry--Equipment and supplies) (Briquets (Fuel))

LOKSHIN, V.A., kandidat tekhnicheskikh nauk; TALDYKIN, K.M., inzhener.

Operational inspection of cleaning heating surfaces of furnaces by steam-blast. Elek, sta. 24 no.12:16-20 D '53. (MERA 6:12) (Furnaces)

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STATE OF THE PARTY OF THE PARTY

LOKSHIN, V.A., kand.tekhn.nauk; MOISEYEV, G.I., inzh.; PAVLENKO, L.I., inzh.; TALDYKIN, K.M., inzh.; VARICHEV, V.A., inzh.

Thermal conditions during the operation of high-pressure radiation wall-type superheaters. Blek.sta. 30 no.1:21-26 Ja \*59. (MIRA 12:3)

(Superheaters)

LOKSHIN, V.A., kend, tekhn. nauk; TALDYKIN, K.M., inzh.

Temporatures in the strengtheners of boilers. Elek sta. 30 no.2:78
F '59.

(Boilers)

IOKSHIN, V.A., kand.tekhn.nauk; PAVLENKO, L.I., inzh.; TALDYKIN, K.M., inzh.

Thermal characteristics of radiation-convectional steam
superheaters. Energomashinostroenie 7 no.5:7-9 My '61.

(MIRA 14:8)

(Superheaters)

LOKSHIN, V.A., kand.tekhn.nauk; PAVLENKO, L.I., inzh.; TALDYKIN, K.M., inzh.;
TARAVKOV, S.S., inzh.

Temperature conditions in the operation of air preheaters with a high degree of air heating. Elek.sta. 32 no.4:24-28 Ap 161.

(Air preheaters)

LOKERTH, V.A., kand. tekhn. rank; TAIPYKIN, K.M., inza.

Increase in the reliability of high-pressure feetwater ecoronizers.

[MIRA 17:11]

Flek. sta. 35 no.7:6-16 Ji 164.

ALEKSEYEV, V.S.; BILTUGA, T.G.; TALDYKIN, O.Ye.; OLEKSANDRUK, A.M.; TIMOSHENKO, A.G.; MALUKHA, N.N.; MINKO, A.F.; SHABEL'NYUK, V.S.; GIRENKO, P.P.; MAZENKO, V.V.

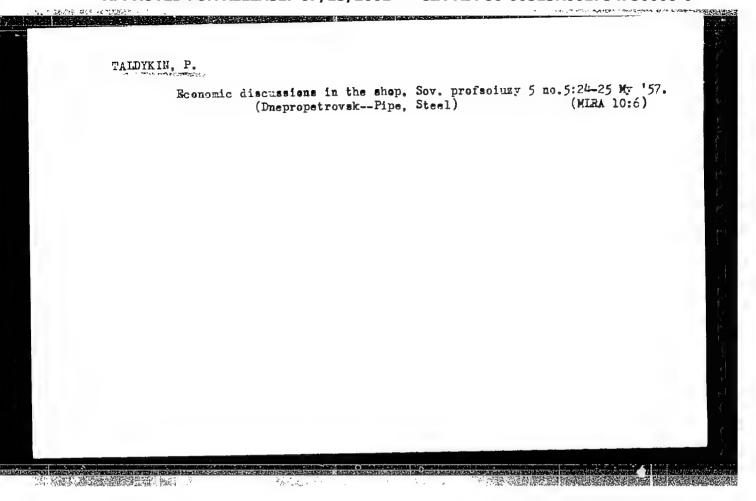
Amount of alkaloids of the 1-methylpyrrolizidone series in the groundsel Senecio borysthenicus Andz. during different vegetation periods and the effect of mowing upon the alkaloid content of the aftergrowth. Nauch. dokl. vys. shkoly; biol. nauki no.2: 152-154 162. (MIRA 15:5)

l. Rekomendovana kafedroy farmatsevticheskoy khimii Dnepropetrovskogo meditsinskogo instituta.
(SENECIO) (PYRROLIZINE)

AIEKSEYEV, V.S. [Aleksieiev, V.S.]; BILYUGA, T.G. [Biliuha, T.H.], student; TALDYKIK, O.Ye., student

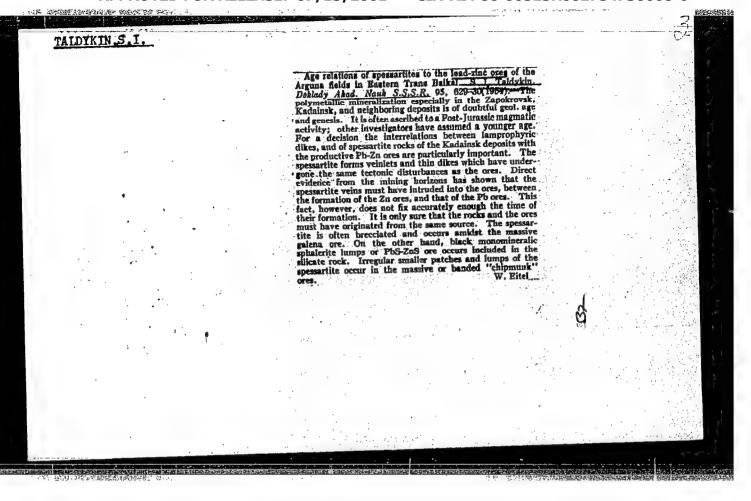
Alkaloids from the 1-methylprrolizidine series. Report No.5: Alkaloids from dusty miller (Senecio cineraria DC. = Gineraria maritima) family Compositae. Farmatsev. zhur. 17 no.1:42-45 (MTRA 15:6)

1. Kafedra farmatsevticheskoy khimii Dnepropetrovskogo meditsinskogo instituta, zaveduyushchiy kafedroy dotsent Kurinna, N.V. (SENECIO) (ALKALOIDS) (HELIOTRIDANE)



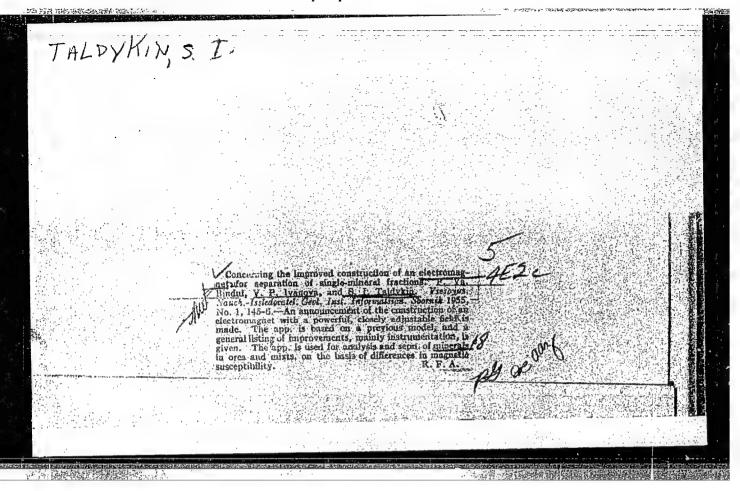
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KRISHTOFOVICH, A.N., redaktor [deceased] SPIZHARSKIY, T.N., redaktor;
BELYAYEVSKIY, N.A., redaktor; VADRANYANTS, L.A., redaktor;
ZAITSEV, I.K., redaktor; KRASMOV, I.I., redaktor; KULIKOV, M.V.
redaktor; LABAZIN, G.S., redaktor; LIBROVICH, L.S., redaktor;
LUR'YE, M.L., redaktor; MALINOVSKIY, F.M., redaktor; NESTEROV,
L.Ya., redaktor; NEKHOROSHEV, V.P., redaktor; SERGIYEVSKIY, V.M
redaktor; TALDYKIN, S.I., redaktor; KHABAKOV, A.V., redaktor;
SHABAROV, N.V., redaktor; SKVORTSOV, V.P., redaktor; KISELEVA,
A.A., tekhnicheskiy redaktor GUROVA, O.A., tekhnicheskiy redaktor.

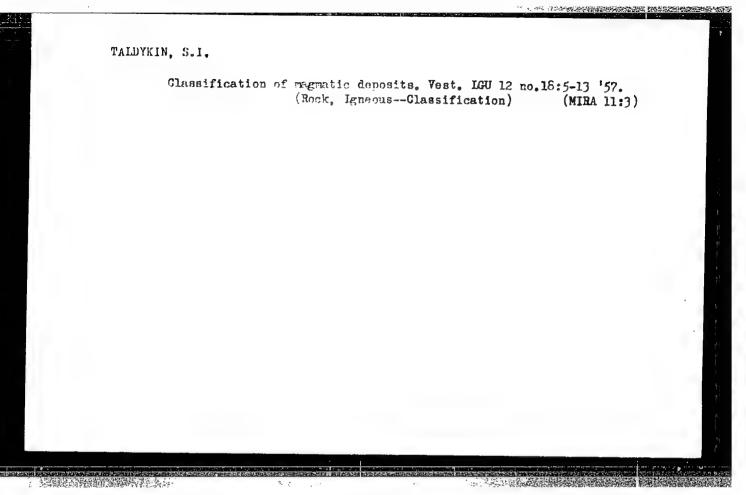
[Geological dictionary] Geologicheskii slovar¹. Moskva, Gos.
nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr.Vol.1
A-L 1955.402 p.
(Geology--Dictionaries)



VOZNESENSKIY, D.V.; AMELANDOV, A.S.; GEYSLER, A.N.; GOLUBYATNIKOV, V.D.; [deceased]; DOMAREV, V.S.; DOMINIKOVSKIY, V.N.; DOVZHIKOV, A.Y.,; ZAYTSEV, I.K.; IVANOV, A.A.; ITSIKSON, M.I.; IZOKH, E.P., KNYAZEV, I.I.; KORZHENEVSKAYA, A.S.; MISHAREV, D.T.; SEMENOV, A.I.; MOROZENKO, N.K.; NEFEDOV, Ye.I.; RADCHENKO, G.P.; SERGIYEVSKIY, V.M.: SOLOV'YEV, A.T.; TALDYKIN, S.I.; UNKSOV, V.A.; KHABAKOV, A.V.; TSEKHOMSKIY, A.M.; CHUPILIN, I.I.; SHATALOV, Ye.T., glavnyy redaktor; KRASNIKOV, V.I., redaktor; MIRLIN, G.A., redaktor; RUSANOV, B.S., redaktor; POTAPOV, V.S., redaktor izdatel'stva; GUROVA, O.A., tekhnicheskiy redaktor.

[Instructions for organization and execution of geological surveys in scales of 1:50,000 and 1:25,000] Instruktsiia po organizatsii i proizvodstvu geologo-s\*emochnykh rabot masshtabov 1:50,000 i 1:25,000. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. 1956. 373 p. (MIRA 10:6)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr. (Geological surveys)



Initial vertical zoning in hydrothermal deposits. Nauch.dokl. vys.shkoly; geol.-geog.nauki no.1:188-194 59.(MIRA 12:6)

l. Leningradskiy universitet, geologicheskiy fakul'tet, kafedra poleznykh iskopayemykh.
(Ore deposits)

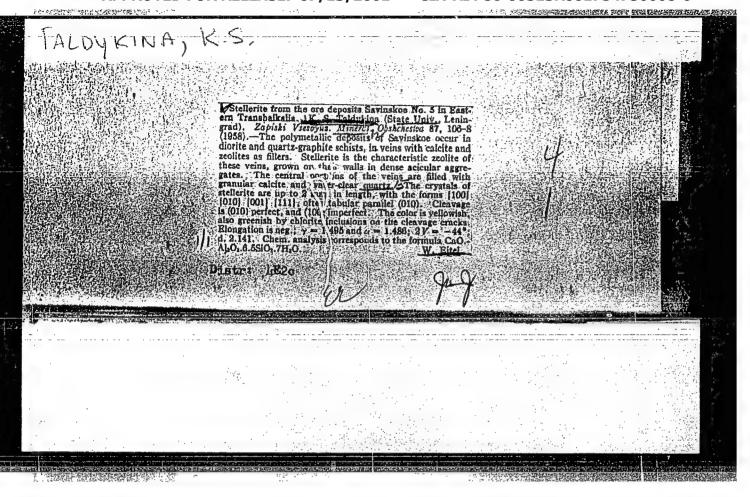
SIDEL'HIKOVA, Ye.A.; TALDYKIN, Ye.M.

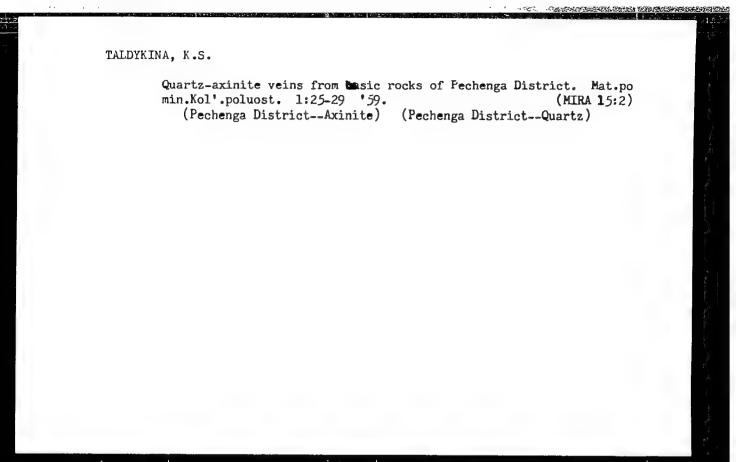
Change of the chemical composition of underground waters in the Voronezh region. Razved. i okh. nedr 31 no.7:46-49
J1 165. (MIRA 18:11)

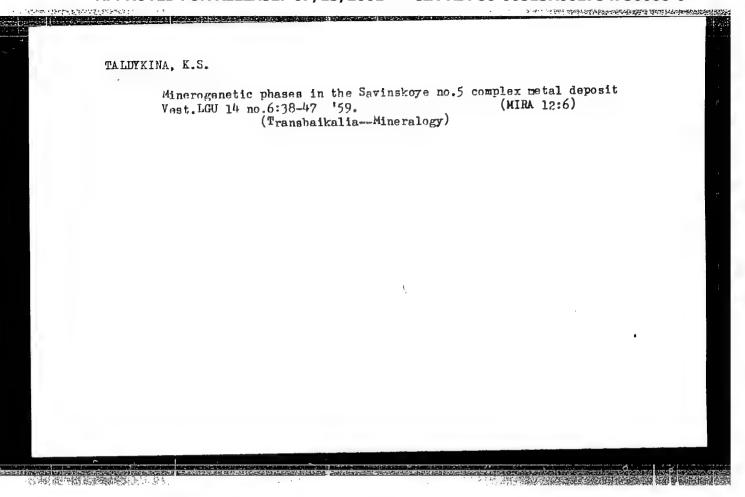
1. Gidrogeologicheskaya stantsiya TSentral'no-chernozemnoy polosy.

### "APPROVED FOR RELEASE: 07/13/2001 CIA-R

CIA-RDP86-00513R001754730008-6







Tallyfill A, R. S., Cand Geol-Min -- (fiss) "mineralogy of the polymetallic deposits in the Klichkinskiy Group in Eastern Transbaikalia -- Davinskiy No 5, Pochekuyevskiy and Klichkinskiy." Leningrad, 1966. lc pp; 1 page of tables; (Leningrad Order of Lenin State Univ im A. A. Zhdanov); 225 copies; price not given; (KL, 19-60, 131)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754730008-6"

THE REPORT OF THE PARTY OF THE

TALDYKINA, K.S.

Axinite from the No.5 Savinskoye deposit in eastern Transbaikalia.

Zap.Vses.min.ob-va 89 no.2:227-231 '60. (MIRA 13:7)

Leningradskogo universiteta.

(Savinskoye region (Transbaikalia)--Axinite)

ISKYUL', Nadezhda Vladimirovna; TALDYKINA, Kira Sergeyevna; KUZNETSOV, S.S., doktor geol.-miner. nauk, otv. red.; SHENGER, I.A., red. izd-va; GALIGANOVA, L.M., tekhn. red.

[Guidebook for the A.P.Karpinskii Geological Museum of the Academy of Sciences of the U.S.S.R.; history of the earth and life]Putevoditel' po Geologicheskomu muzeiu ir. A.P.Karpinskogo AN SSSR; istoriia Zemli i zhizni. Moskva, Izd-vo Akad. nauk SSSR, 1962. 95 p.

(Leningrad—Geological museums)

TALDYKINA, Kira Sergeyevna; KUZNETSOV, S. S., prof., otv. red.; CHUZHOV, A. A., red. izd-va; GALIGANOVA, L. M., tekhn. red.

[Mineralogy of complex metal deposits of the Klichka group in eastern Transbaikalia (Savva No. 5, Pochekuyevo, and Klichka).] Mineralogii polimetallicheskikh mestorozhenii Klichkinskoi gruppy Vostochnogo zabaikalia (Savinskoe No. 5, Pochekuevskoe i Klichkinskoe). Moskva, Izd-vo. Akad. nauk SSSR, 1962. 120 p. (Akademiia nauk SSSR. Geologicheskii muzei. Trudy, no.10).

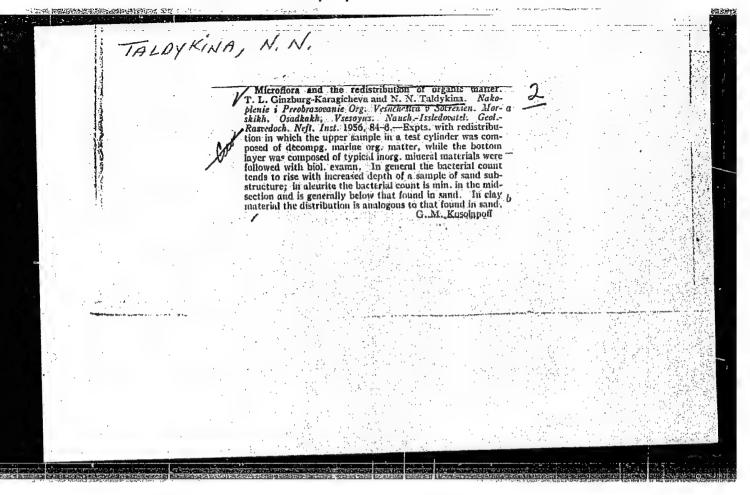
(Transbaikalia-Ore deposits)

**第一个情况是这种特殊的。** 

VEBER, V.V., professor; GINZBURG-KARAGICHEVA, T.L.; GLEBOVSKAYA, Ye.A.;
GORSKAYA, A.I.; ZAKHAROV, A.A.; MANUCHAROVA, Ye.A.[decessed];
MEKHTIYEVA, V.L.; ROMM, I.I.; SAVICH, V.G.; TALDYKINA, N.N.,
FOKINA, N.I.; YURKEVICH, I.A.; MIRCHINK, M.F., professor, redaktor;
L'VOVA, L.A., redaktor; TROFIMOV, A.V., tekhnicheskiy redaktor.

[Accumulation and transformation of organic substances in recent sea sediments; in the light of the problem of oil origin] Nakoplenie i preobrazovanie organicheskogo veshchestva v sovremennykh morskikh osadkakh; v aspekte problemy proiskhozhdeniia nefti. Sbornik statei pod red. M.F. Mirchink. Moskva, Gos. nauchno-tekhn. izd-ve neftianei i gorno-toplivnoi lit-ry, 1956. 342 p. (MLRA 9:6)

1.Vsesoyuznyy mauchno-issledovatel'skiy geolegorazvedechnyy institut.
2. Chlen korrespondent AN SSSR (for Mirchink)
(Sapropelites) (Marine biology) (Petroleum geolegy)



| L 26662-66 EWT(1)/EWT(m) ACC NR: AT6010461                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | SOURCE CODE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | UR/3119/65/000/0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 03/0115/0132                                                                                       |
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| AUTHOR: Tale, A. K.  ORG: None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 54<br>52<br>Byl                                                                                    |
| TITLE: Intracenter lumines SOURCE: AN LatSSR. Institu Ionyye kristally (Ionic cry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | رد<br>t fiziki. Radi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | atsionnaya fizika                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ı, no. 3, 1965.                                                                                    |
| TOPIC TAGS: cesium compount temperature dependence, sci ABSTRACT: To determine the CsI-In crystal, the author characteristics of its lumi Measurements were made under 80 and 300K, and in additional time and of the form of the measured. The procedure compound the photoscintillations produced light pulses (~10 <sup>-8</sup> sec). was investigated with a more contacted to the procedure of the procedure compounds of the procedure of the photoscintillations produced the procedure of the photoscintillations produced the pulses (~10 <sup>-8</sup> sec). | d, iodide, actintillator, excintillator, excintation of interesting the mescence as a fer both stational the temperature photoscintillations of obtaining the excitation of th | vated crystal, luted state, optic<br>intracenter lumined the temperal are unction of the temperal control and pulsed control of the crystal in of the crystal in the crystal | escence of the ad spectral emperature additions at the damping stal were onto of single with short |

| corded with a ph<br>the emission spe<br>86K the peak shi<br>appears at 80K.<br>to the radiative<br>of view of the v<br>The results poir<br>center has two 1 | or of a spectro<br>notomultiplier<br>ectrum consist<br>fts to 560 nm<br>The nature of<br>etransitions<br>various transist<br>to the conclevels $^{3}P_{1}$<br>properties of | ophotometer. The so and an oscilloscope s of a single broad a. An additional emit this band, and espin the In <sup>+</sup> ion, is obtions that can take lusion that in the end $^{3}P_{1}$ , and their the CsI-In crystal of the work and $^{2}P_{1}$ . | band at 554 nm. ssion band at 448 ecially its related in the system excited state the The author than Morgenshtern for | At 3 nm tion e point tem. In mines nks |
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| SUB CODE: 20/                                                                                                                                               |                                                                                                                                                                             |                                                                                                                                                                                                                                                          |                                                                                                                        |                                        |

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| . C. C.: La Liceda. Tavestija. Ceriya disieb<br>7-1-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | echikh i tekkhaicheskikh nauk, no. 3, 1966,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| M.J. Mois the article is devoted to an evalue that actually the actual in an earlier paper (Inv. AN ES) and present actual on their basic certain assumptions of the charge levels in the InT expectabilities of approximations transitions from InT in MI. To be beconstrated that all the that the level $^{3}$ Py of the InT is split and to the level $^{3}$ Py of the InT is split and to the actual a     | nowhick per fire i tekhn. name, 1969, 6, poions concerning the nature and relative cited ion in dI-In, and also determines the monage levels to the ground level of the experimental data agree with the assumption had each sub-band of the leng-wave absorp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Card 1/2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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L 34981-66 EWT(1)/EWT(m)/EWT(t)/ETI
ACC NR: ARBOHA813

IJP(c) JD/JG

SOURCE CODE: UR/0371/65/000/006/0003/0010

AuTilon: Tale, A. K.

ORG: Institute of Physics, AN LatSSR (Institut fiziki AN LatSSR)

Triid: Investigation of the intracenter luminescence of KI-In. I.

SOURCE: AN Latser. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 6, 1965, 3-10

TOPIC TAGS: potassium compound, luminescence, luminescence center, activated crystal, compution band, scintillation, temperature dependence, Luminescence Trecrain, FACITATICAL SIECTRUM
ARSTRACT: The purpose of the investigation was to check on the assumption that long-wave bands of activator absorption of KI-In correspond to transitions from the \$\frac{1}{0}\$ state to components of the split \$\frac{3}{1}\$ level, by verifying whether two luminescence bands corresponding to inverse transition to the ground state \$\frac{1}{3}\$0 of the In \$\frac{1}{3}\$ level actually exist, inasmuch as so far one of the bands, at 571 nm, has been experimentally observed. To this end, a study was made of the form of the photoscintillations of KI-In by determining in the luminescence spectrum at different crystal temperatures, the spectrum of excitation of individual bands under pulsed excitation, the luminescence and excitation spectrum in the stationary mode, and also the absorption spectrum at different crystal temperatures from 80 to 300K. The experiments were carried out by obtaining oscillograph traces of single photoscintillations excited by short-duration light pulses from a condensed spark discharge. The test experimental setup and procedure are briefly described. The results disclosed the presence of a short

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L 34981-66

ACC NR: AF6016813

(non-equilibrium) and a long (equilibrium) component in the photoscintillation. The spectral distribution of the short component forms the expected 453 nm luminescence band (88K), while that of the long component the already known 571 nm luminescence band (592 nm at 88K). Both components are excited in the activator absorption bands of KI-In. With decreasing temperature, the difference in the positions of the maxima of the luminescence bands of KI-In increases, while the difference between the maxima of the bands in the long-wave absorption doublet decreases. In addition, a short-wave luminescence band was observed (453 nm at 88K), which is attributed to  $^3P_1$  - $^1S_0$  alkali-halide crystals activated with thallium. Orig. art. has: 5 figures and 1

SUB CODE: 20/ SUBM DATE: 04Mar65/ ORIG REF: 016/ OTH REF: 001

Card 2/2 1515

SOURCE CODE: UR/0371/66/000/005/0015/0019

AUTHOR: Chernyak, V. G. — Cernaks, V.; Dunina, A. A. — Dunina, A.; Larionov, M. G. — Larionovs, M.; Plyavinya, I. K. — Plavina, I.; Shamovskiy, L. M. —

Samovskis, L.; Tale, A. K. - Tale, A.

-ACC NR: AP7001327

ORG: Physics Institute AN LatSSR (Institut fiziki AN Latv. SSR)

TITLE: Photoscintillations of KCl-Tl excited in the F-band

SOURCE: AN LatSSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 5, 1966, 15-19

TOPIC TAGS: scintillation, light excitation, excitation spectrum, of beend

ABSTRACT: An investigation was made of the rapid transfer of energy from F-centers to activator centers and of the time necessary for such transfer when the crystals are subjected to pulsed excitation. The investigation was based on the comparison of the kinetics of activator luminescence excited directly in the center of luminescence (Tl-scintillation) and in the F-absorption band (F-scintillation). KCl-Tl-F crystals (0.2 or 0.5 mol% Tl in melt) were irradiated with x- or gamma rays. The concentration of F-centers did not exceed 5 x  $10^{17}$  cm<sup>-3</sup>. The crystals were placed in a metallic cryostat and excited with light pulses (- $10^{-7}$  sec) from a spark. The excitation was applied alternately in the 247 and 560 nm bands. A coincidence was found between F-scintillation and Tl-scintillation with regard to their time

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ACC NR: AP7001327

characteristics in the range from room temperature to the temperature of liquid ' nitrogen. The time characterizing the slow exponential decay TLC (LC-long component) in F-scintillations changed from  $2.5 \times 10^{-7}$  sec to  $5 \times 10^{-5}$  sec with a change in temperature from 300 to 80K. At low temperatures, a sharp emission (short component-SC) of luminescence occurs which describes the form of the exciting spark pulse, as in the case of Tl-scintillation. The ratio of quantum yield of SC and LC of F-scintillation is the same as for Tl-scintillation in the entire range and LC or r-scinciliation is the same as for it-scinciliation in the 3P<sub>1</sub> level with of measured temperatures, which shows that the overpopulation of the 3P<sub>1</sub> level with respect to the  $^3P_0$  level at F-scintillation is the same as in the case of T1-scintillation. The SC and LC of luminescence in F-scintillations relate to the activator luminescence of KC1-T1, i.e., to the 305 nm band, but not to the 335 nm band, which corresponds to the hole centers. The maxima of the excitation spectra of F-scintillation and absorption spectra coincide and are in the region of 560 ± 5 nm. From the experimental results, it follows that the mechanism of F-scintillation formation is of the electron type. This means that during short-time crystal excitation in the F-abscrption band, free electrons, which are generated in the conductivity zone, recombine with holes, which are localized due to x- or gamma-irradiation on the activator ion or close to it. This process is accompanied by the excitation of the activator. Orig. [JA] art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 06Dec65/ ORIG REF: 007/ ATD PRESS: 5109

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S/048/61/025/003/022/047 B104/B214

AUTHORS:

Vitol, I. K. and Tale, I. A.

TITLE:

Investigation of the photoelectric polarization of the

crystal phosphors on the basis of ZnS

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya,

v. 25, no. 3, 1961, 368-369

TEXT: This paper was read at the Ninth Conference on Luminescence (Crystal Phosphors) held in Kiyev from June 20 to June 25, 1960. For the study of the mechanism of recombination processes in crystal phosphors it is expedient to apply, in addition to optical methods of investigation, also electrical methods which permit an immediate determination of the sign of the excited carriers. On certain assumptions, a study of the photoelectric polarization can furnish not only the sign of the carriers but can also give the ratio of the electron and hole components in mixed conductivity. The surface condition strongly affects the crystal photoeffect in semiconductors. The existence of surface levels affects also the amount and sign of the experimentally measured photoelectric polarization

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Investigation of the photoelectric ...

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of the crystal phosphors. However, a number of experimental facts show that on account of the specific properties of crystal phosphors and under certain conditions (excited conductivity much larger than equilibrium conductivity) the surface levels have no effect on the sign and amount of photoelectric polarization. In the region of fundamental absorption of ZnS phosphors activated by Cu, Ag, and Mn, light excites an n-type conductivity. The p-type conductivity at room temperature lies within the limits of the experimental error, that is, within less than 5% of the total conductivity. If a ZnS-Cu crystal is exposed to light of wavelength 312 m $\mu$ , the photoelectric polarization reaches a constant value of the potential difference. On exposure to light in the range of wavelengths 350 - 1150 m $\mu$ , there occurs, along with the extinction of luminescence, a decrease of the photoelectric polarization to  $\phi_n$ . The dependence of

 $\phi_n$  and  $\phi_{nu}$  on the wavelength of the light is shown graphically in Fig. 1. This figure also gives the intensity of luminescence  $\Delta I/I$  and the additional absorption  $\Delta D/D$  according to data of V. V. Antonov-Romanovskiy (Ref. 7: Antonov-Romanovskiy V. V., Shchukin I. P., Dokl. AN SSSR, 71, 2 (1950)) as functions of the wavelength. The decrease of the photoelectric polarization in the range of 500-800 m $\mu$  can be explained as due Card 2/4

Investigation of the photoelectric...

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to the following two causes: 1) The infrared light sets the holes free, which combine with the localized electrons, and so the electron concentration in the conduction band is decreased. 2) The infrared light sets the holes free, and the photoelectric polarization decreases on account of the diffusion of the holes to the unexposed surface of the specimen. The absence of decrease of the photoelectric polarization above 1,150 m/m shows that the extinction of luminescence in this range differs from that in the range 500-800 m/m. Ch. B. Lushchik is thanked for interest and discussions. There are 1 figure and 7 Soviet-bloc references.

Legend to Fig. 1: Dependence of the photoelectric polarization of the low-inertia component  $\varphi_n$  and the inertia component  $\varphi_{nu}$ , and of the relative decrease  $\Delta I/I$  of luminescence on the wavelength of irradiation for a ZnS-Cu phosphor under constant excitation with light of wavelength 312 m $\mu$ . Card 3/4

L 19663-63

EWT(1)/EWP(q)/EWT(m)/EWP(B)/BDS AFFTC/ASD/ESD-3/

IJP(C) JD/JG

ACCESSION NR: AR3006991 S/0058/63/000/008/E056/E057

SOURCE: RZh. Fizika, Abs. 8E396 '

AUTHOR: Tale, I. A.

TITLE: Possibility of determining the sign of charge carriers by investigating the anisotropic electric conductivity of the contact between a metal and alkali halide crystal

CITED SOURCE:

Sb. Fiz. shchelochnogaloidn. kristallov, Riga, 1962,

381-384

TOPIC TAGS: space charge, metal-crystal contact, alkali halide crystal , carrier distribution

TRANSLATION: Assuming the theory of physical contact for semiconductors to be valid also for the contact between a metal and a material with a broad forbidden band, the author proposes a method for

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ACCESSION NR: AR3006991

determining the sign of the excited charge carriers from the distribution of the space charge in the regions near the electrodes. In the case of electron type conductivity, a positive space charge is expected near the cathode, while for hole conductivity negative space charge is expected near the anode; both cause redistribution of the potentials in the crystal. The vibrating-probe method is used to measure the potential distribution. It is established that in KCl exposed to X-rays light in the F band excites electron conductivity. In the case of linear heating at a rate of 0.2°C/sec in KCl exposed to X-rays four regions were observed, with different character of space-charge variation — two with formation of positive charge at the cathods and two with negative charge produced in the near-anode region of the crystal. A. Poletayev.

DATE ACQ: 06Sep63 SUB CODE: PH ENCL: 00

Card 2/2

ACC NRI AP7005004

SOURCE CODE: UR/0048/66/030/009/1560/1562

AUTHOR: Tale, I.A.; Bogan, Ya.R.; Bomika, V.A.; Vitol, I.K.

ORG: none

TITLE: Concerning the mechanism of recombination processes in zinc sulfide /Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.30, no.9, 1966, 1560-1562

TOPIC TAGS: photoconductivity, zinc sulfide, irradiation, hole conduction, electron conduction

ABSTRACT: The authors have investigated the infrared-stimulated photoconductivity in different ZnS crystals, determining the sign of the carriers by means of Kall effect and photoelectric polarization measurements. The investigated specimens fell into two main groups: high-resistivity crystals, and low-resistivity ZnS crystals containing an excess of Zn, whose high equilibrium conductivity was due to the presence of a high concentration of lattice microdefects. None of the specimens exhibited thermal hysteresis of the electric conductivity, and their luminescence yields were very low. After excitation in the fundamental absorption band, photoconductivity could be stimulated in specimens of both types by irradiation in any of four bands peaking at 0.95, 1.6, 2.0, and 2.8 eV. In the low-resistivity specimens the photo-

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ACC NR: AP7005004

current was carried by electrons regardless of the wavelength of the stimulating photons; in the high-resistivity specimens the photocurrents stimulated in the 0.95 and 2.8 eV band were carried by electrons, and those stimulated in the 1.6 and 2.0 eV bands were carried by holes. Moreover, de-excitation of the high resistivity crystal: in the 0.95 eV band reduced the photosensitivity in the 1.6 and 2.0 eV bands, de-excitation in the 1.6 or 2.0 eV bands reduced the photosensitivity in the 0.95 eV band, irradiation in the 2.8 eV band restored the photosensitivity in the other three bands Cooling from room temperature to liquid nitrogen temperature destroyed the photesensitivity of the 1.6 and 2.0 eV bands; the photosensitivity could be restored only by further excitation in the fundamental absorption band. It is concluded that the 1.6 and 2.0 eV bands are not simple; stimulation in these bands excites trapping centers of several different kinds, of which some have excited states in the forbidden gap. Sensitivity in the 2.8 eV band appeared in specimens that exhibited a green luminescence; the authors accordingly associate this band with an activator. The photoconductivity stimulated in the 2.8 eV band at room temperature had both electron and hole components; the holes were not revealed by the Hall effect measurements because of their low mobility. Orig. art. has: 2 figures.

SUB CODE: 20

SUBM DATE: none

ORIG. REF: 003

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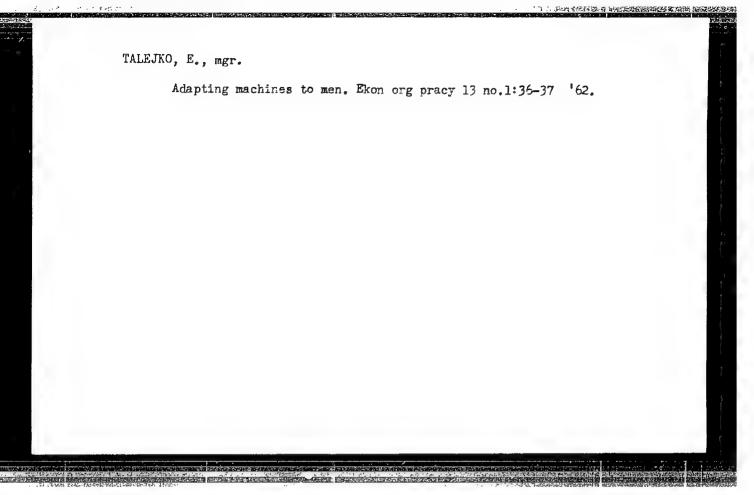
。 1995年1月至7日的北京市时间至8年初日中国市场

WITWICKI, Tadeusz; TALEJKO, Eugeniusz; MADRZYCKI, Tadeusz; MATERSKA, Maria; MATUSEWICZ, Czeslaw; EYSYMONTTOWA, Maria; TYSZKOWA, Maria; STRABURZYNSKA, Teresa; TYSZKA, Zbigniew; WYSOCKA, Ludwika; STACHOWSKI, Ryszard; RADWILOWICZ, Ryszard; HORNOWSKI, Boleslaw; SEDLAK, Jiri

New books. Przegl psychol no.8:123-185 '64.

TALEJKO, Eugeniusz, mgr.

"Machine and humanism. The human problem in the industrialized civilization" by Georges Friedmann. Reviewed by Eugeniusz Talejko. Przegl techn no.34:6 24 Ag '60.



TALEJKO, Eugeniusz, mgr

"Engineering psychology" by J. Okon, L. Faluszkiewicz. Reviewed by Eugeniusz Talejko. Przegl techn 84 no.47:7 24 N '63.

USSR , General and Special Loology. Insects

Abs Jour: mef Thur-Biol., No 4, 1955, 16465

Author : Talenga N. A., Zhigayev G.N.

Inst : Institute of Entomology and Phytopathology Aca-

demy of Sciences Ukrainian Soviet Socialist Republic.

Title : The Pre-sowing Treatment of Sugar-Beet Seeds with a 10% Hexachlorane Dust in the Control of Beet

Weevils. (O predposevnol obrabotke semyan sakharnoi svekly 12%-nym dustom heksakhlorana dlya

bor'by so sveklovichnym dolgonosikom)

Orig Pub: Nauchn. tr. Instituta entomol.i fitopatol. AN

USSR, 1956,7.88-95.

Abstract: In production experiments the treatment of the

seeds with a suspension of 12% dust of hexachlorane (6 kg/c and 70 lit/c of water) and dusting with a pulverised technical hexachlorane were equal in value as to the weevil's paralysis, but the

Card 1/3

USSE / General and Special 07/13/2001 Insects RDP86-00513R001754730008-6"

Abs Jour: Ref Zhur-Biol., No 4, 1958, 16465

Abstract: weevils when dusted died sooner, and the young crop was less damaged. The treatment of the seeds

with a suspension of technical hexachlorane (1kg/c

and 17 lit/c of water) was considerably less effective than dusting with the same preparation. The beet sprouts from seeds treated with a 12% dust of hexachlorane appeared simultaneously with those of the control plants. On the fourth day

of the appearance of the sprouts 82.8% of the insects died at the initial sowing and 94.7% died in the second sowing. The toxicity in the sprouts in the first case lasted 6-7 days and in the second case only 4-5 days (due to high temp-

erature at the beginning of June). In spite of the shortness of the period of the sprouts toxicity,

the protective planting played a big role, pre-

Card 2/3



TALENSKIY, O. N.

Dissertation: "On the Photoelectric Method of Determining Heat-Radiation Capacity of Liquid Metal." Cand Tech Sci, Inst of Metallurgy Imeni A. A. Baykov, Acad Sci USSR, 29 Apr 54. (Vechernyaya Moskva--Moscow, 20 Apr 5h)

SO: SUM 243, 19 Oct 1954

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SVET, D.Ya.; TALENSKIY, O.N.

Photoelectric method and testing equipment for the determination of the radiating properties of liquid metals. Trudy Inst.met. no.5: 183-188 '60. (MIRA 13:6) (Prometry) (Prometry) (Prometry) (Photoelectric measurements)

TALENSKIY, O.N., kand. tekn. nauk, red.; KHIDEKEL', I.Ya., red.; REZCUKHOVA, A.G., tekhn. red.

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[Research organization in the industry of the U.S.A.] Organizatsila nauchnykh issledovanii v promyshlennosti SShA. Bd red. O.N.Talenskogo. Moskva, Izd-vo inostr. lit-ry, 1962.
314 p. Translated from the English. (MIRA 16:9)
(United States--Research, Industrial)

ACCESSION NR: AP4033096 S/0120/64/000/002/0005/0016

AUTHOR: Karpov, Yu. A.; Kontor, Ye. I.; Talenskiy, O. N.

TITLE: Magnetic-discharge cold-cathode pumps (A review)

SOURCE: Pribory\* i tekhnika eksperimenta, no. 2, 1964, 5-16

TOPIC TAGS: magnetic discharge pump, vacuum pump, fine vacuum pump, magnetic discharge cold cathode pump, Vacion pump, Penning discharge pump, NEM Soviet make pump

ABSTRACT: A review of the exhaustion mechanism, designs, and applications of magnetic-discharge cold-cathode pumps, based on 1956-63 Soviet sources and 1937-61 Western sources, is presented. Both the advantages and disadvantages of these pumps are listed and characteristics of some Soviet-made pumps are supplied. "In the Soviet Union, pumps of this kind are built for a rate-of-exhaustion of 0.2, 8, 30, 100, 300, and 1,000 litr/sec; also, oilless exhaustion

Card 1/2

ACCESSION NR: AP4033096

sets based on magnetic-discharge pumps with 30, 100, and 300 litr/sec." The weight, size, and some design details of Soviet NEM-30-2, NEM-100-2, and NEM-300-1 pumps are given, as well as the weight and size of their powersupply units. Orig. art. has: 9 figures and 2 tables.

ASSOCIATION: Institut metallurgii (Institute of Metallurgy)

SUBMITTED: 09Apr62

DATE ACQ: 11May64

ENCL: 00

SUB CODE: PH, IE

NO REF SOV: 005

OTHER: 024

Card 2/2

- 1. THEFOROVSKAIA, V. V.
- 2. USSR (600)

- 4. Electric Conduc ivity
- 7. Electric conductivity of colored cotton. Tekst. From. 12, no. 11, 1957.

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754730008-6"

ORLOVA, Z.M., kand. tekhn. nauk, dots.; TALEPOROVSKAYA, V.V., kand. tekhn. nauk, dots.

Increasing the evenness of silver from LVS-305 drawing frames.

Izv. vys. ucheb. zav.; tekh. tekst, prom. no.1:78-82 '58.

(MIRA 11:5)

l. Ivanovskiy tekstil'nyy institut. (Spinning machinery)

ORLOVA, Z.M.; TALEPOROVSKAYA, V.V.

Establishing operating cycles for vertical and horizontal openers used in processing machine-gathered cotton. Izv.vys.ucheb.zav.; tekh.tekst.prom. no.2:67-74 '58. (MIRA 11:5)

 Ivanovskiy tekstil'nyy institut. (Cotton machinery)

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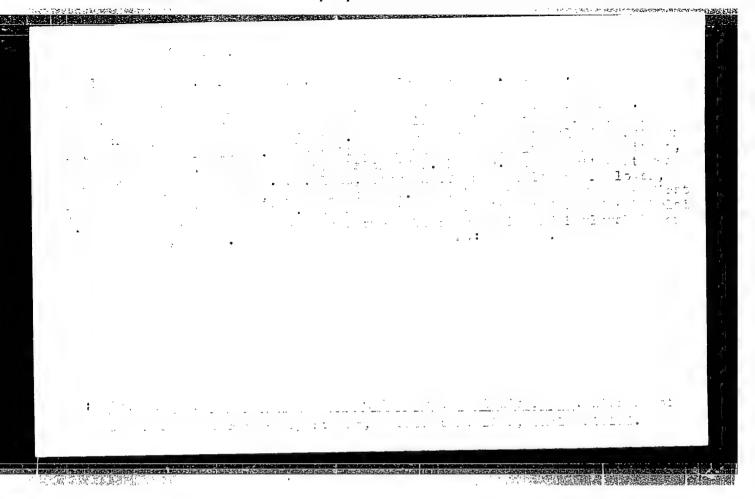
ZOTIKOV, V.Ye., prof., doktor.tekhn.nauk; BUDNIKOV, I.V.; TRYKOV, P.P.;
GINZBURG, L.N., retsenzent; KARPOV; L.I., retsenzent; ORLOVA,
Z.M., retsenzent; TALEPOROVSKAYA, V.V., retsenzent; FINKEL SHTEYN,
I.I., retsenzent; KOPKLEVICH, Ye.I., red.; SHAPENKOVA, T.A., tekhn.red.

[Fundamentals of the spinning of fabrics] Osnovy priadeniia voloknistykh materialov. Pod red. V.E.Zotikova. Moekva, Gos.nauchno-tekhn.izd-volit-ry po legkoi promyshl., 1959. 506 p. (MIRA 12:11)

1. Kafedra pryadeniya khlopka Ivanovskogo tekhnologicheskogo instituta (IvTI) (for Karpov, Orlova, Taleporovskaya, Finkel'shteyn).

(Spinning)

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|               | 9. Monthly List of Russian Accessions. Library of Congress, 1981 1953, Uncl. | Garage                                    |
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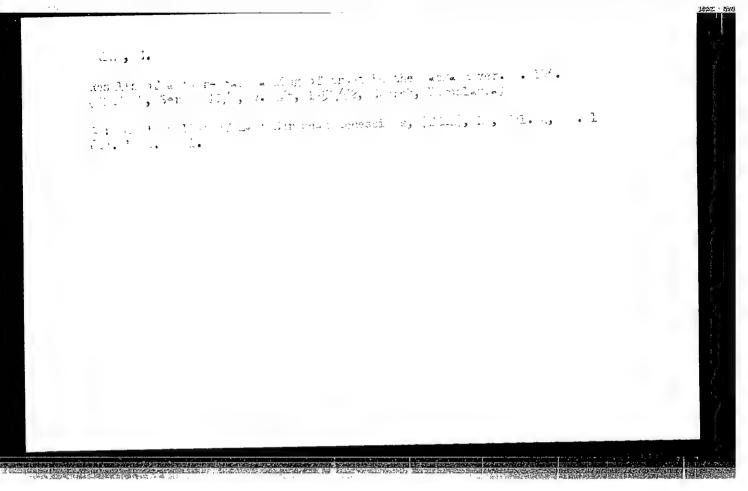
Abs Jour : Ref Zhur - Fizika, Re 4, 1959, No 9655

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There : Optical System of Control Stationery (5 to describe)

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Abstract : Survey article.

Carl : 1/1



TALER, Z.

List of fresh-water fishes and the areas they inhabit in Yugoslavia, g. 425, (GLASUIK, No. 5/6, 1953, Belgrade, Yugoslavia)

SO: Monthly list of East European Accessions, (REAL), LC, Vol. 4, No. 1 Jan. 1955, Uncl.

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Charmotherize distructs and indexes of load capacity in power systems. r. 338.

Pol. , c. , on t. 1955 Lanker of the La Preby, December 1959

Service: List Lurinean Addession List. Library of Columnss Vol. 5, lo. 3, August 1956

BOYGEL', Z., nauchnyy sotrudnik; TALESHIK, Ye., nauchnyy sotrudnik; DUSHBOV, Yu., nauchnyy sotrudnik; FAREHOMOVSKAYA, B., nauchnyy sotrudnik; GLUZMAN, M., nauchnyy sotrudnik

Effectiveness of manufacturing highly prefabricated reinforced concrete elements and joiner's articles. Zhil. stroi. no.1: 5-7 '64. (MIRA 18:11)

l. Nauchno-issledovatel'skiy institut zhelezobetonnykh izdeliy stroitel'nykh i nerudnykh materialov Glavnogo upravleniya cromyshlennosti stroitel'nykh materialov i stroitel nykh detaley.

#### "APPROVED FOR RELEASE: 07/13/2001

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Instally Index of an a manuscry Accessions (ELFT) in. Vel. 7, no. 2, February 1987
```

TALETAVICIUS, Vladas; ZOIYNAS, Ricardas; PRANAITIENE, R., red.;
PAKETTE, O., tekhn. red.

[Sand concrete, a building material of the future] Smelio betonai - progresyvi statybine medaiaga. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1962. 24 p.

(NIRA 15:12)

(Concrete)

TALETSKIY, V.

Roll-call of generations. Sov. profectuzy 19 no.20:26-29
0 '63. (MIRA 16:11)

1. Starshiy master tsekha shtampov i prisposobleniy
Kirovskogo zavoda, Leningrad.

TALETSKIY, Vladimir Aleksandrovich; LEPIE, A.E., red.

[Along our fathers' path] Dorogoi ottsov. Leningrad, Lenizdat, 1964. 105 p. (MIRA 17:4)

1. Starshiy master tsekha shtampov i prisposobleniy Kirovskogo zavoda, Kirovskiy rayon, Leningradskaya oblast' (for Taletskiy).

Institut stroitel's type I architect by AU Litevskey SSR.

1. Institut stroitel's type I architect by AU Litevskey SSR.

TALEV, Risto, ing. (Skopje, Lenjinova 65)

Graphical representation of interdependence of the elements of various clothoids (similarity of clothoids). Tehnika Jug 16 no.11:1949-1943

1. Vodeci projektant preduzeca "Projektant", Skopje.

TALEV, Risto, ing. (Skopje, Lenjirova ul.65)

The Tabumer system. Tehnika Jug no.3:446-459 '62.

1. Projektant Projektantskog preduzeca "Projektant", Skopje.